

WHAT IS CLAIMED IS:

1. A method of improving the visual perception ability of a person with respect to a particular eye condition of at least one eye, comprising:

in at least one evaluation session of an evaluation phase, displaying to the person a plurality of images selected to test the visual perception ability of the person with respect to at least one visual defect, and to elicit responses from the person indicative of the level of the person's visual perception ability with respect to said at least one visual defect;

utilizing said responses to select another plurality of images designed to treat the person with respect to a detected visual defect and thereby to improve the visual perception ability of the person with respect to the detected visual defect;

and in a treatment phase, applying to said at least one eye of the person, training glasses with reduced refraction for the respective eye;

and displaying to the person said another plurality of images in at least one treatment session until the visual perception ability of the person has been improved with respect to said detected visual defect.

2. The method according to Claim 1, wherein said treatment phase includes a plurality of treatment sessions in each of which are displayed to the person a plurality of images designed to elicit responses to be used for selecting the plurality of images in a subsequent treatment session such as to progressively improve the visual perception ability of the person with respect to the detected visual defect.

3. The method according to Claim 2, wherein after each treatment session, the refraction of the training glasses is increased, decreased, or remains the same for the next treatment session as determined in order to progressively improve the visual perception ability of the person with respect to the detected visual defect.

4. The method according to Claim 3, wherein the eye to which the training glasses are applied may change, left, right or both eyes, as determined, in order to progressively improve the visual perception ability of the person with respect to the detected visual defect.

5. The method according to Claim 2, wherein at least one predetermined parameter of the plurality of images displayed in one treatment session is varied in the subsequent treatment session.

6. The method according to Claim 2, wherein each of said treatment sessions includes a plurality of visual perception tasks in each of which there is displayed to the person at least one image including stimuli designed to elicit a response useful for selecting at least one other image to be displayed in the subsequent visual perception task of the respective treatment session such as to progressively improve the visual perception ability of the person with respect to the detected defect.

7. The method according to Claim 6, wherein after at least one treatment session, the refraction of the training glasses is increased, decreased, or remains the same for the next treatment session as determined in order to progressively improve the visual perception ability of the person with respect to the detected visual defect.

8. The method according to Claim 7, wherein the eye to which the training glasses are applied may change, left, right or both eyes, as determined, in order to progressively improve the visual perception ability of the person with respect to the detected visual defect.

9. The method according to Claim 6, wherein said visual perception tasks in at least some of said sessions in the treatment phase include spatial frequency changes in which the spatial frequency of the stimuli is changed.

10. The method according to Claim 9, wherein the spatial frequency is changed starting with lower spatial frequencies and progressively moving to higher spatial frequencies.

11. The method according to Claim 9, wherein after at least one treatment

session, the refraction of the training glasses is increased, decreased, or remains the same for the next treatment session as determined in order to progressively improve the visual perception ability of the person with respect to the detected visual defect.

12. The method according to Claim 11, wherein the eye to which the training glasses are applied may change, left, right or both eyes, as determined, in order to progressively improve the visual perception ability of the person with respect to the detected visual defect.

13. The method according to Claim 6, wherein, in at least some of said treatment sessions in the treatment phase, the orientation of the stimuli is changed.

14. The method according to Claim 13, wherein the eye condition includes astigmatism characterized by a distortion area in an astigmatic zone; and wherein, in at least some of said treatment sessions in the treatment phase, the orientations of the stimuli are changed by progressing towards the distortion area in the astigmatic zone.

15. The method according to Claim 13, wherein after at least one treatment session, the refraction of the training glasses is increased, decreased, or remains the same for the next treatment session, as determined in order to progressively improve the visual perception ability of the person with respect to the detected visual defect.

16. The method according to Claim 15, wherein the eye to which the training glasses are applied may change, left, right or both eyes, as determined, in order to progressively improve the visual perception ability of the person with respect to the detected visual defect.

17. The method according to Claim 6, wherein said treatment phase includes a sufficient number of treatment sessions to improve the person's contrast sensitivity function by the person achieving a desired range of contrast levels representing a desired contrast funnel.

18. The method according to Claim 17, wherein after at least one treatment session, the refraction of the training glasses is increased, decreased, or remains the same for the next treatment session as determined in order to achieve the desired range of contrast levels representing a desired contrast funnel to progressively improve the visual perception ability of the person with respect to the detected visual defect.

19. The method according to Claim 18, wherein the eye to which the training glasses are applied may change, left, right or both eyes, as determined, in order to progressively improve the visual perception ability of the person with respect to the detected visual defect.

20. The method according to Claim 2, wherein said evaluation phase includes a plurality of evaluation sessions in each of which at least one plurality of images are displayed to the person to elicit responses, the responses of each evaluation session being utilized to select the plurality of images to be displayed in the next evaluation session.

21. The method according to Claim 20, wherein each of said evaluation sessions includes a plurality of visual perception tasks in each of which there is displayed to the person at least one image designed to elicit a response useful for selecting at least one other image to be displayed in the subsequent visual perception task of the respective evaluation session such as to progressively improve the evaluation of the visual perception ability of the person with respect to the detected defect.

22. The method according to Claim 1, wherein said plurality of images in at least the treatment phase are images based on Gabor Functions.

23. The method according to Claim 1, wherein said plurality of images are displayed in a client's terminal in both said evaluation phase and said treatment

phase;

and wherein said elicited responses are communicated to a remotely-located server and utilized to select said another plurality of images designed to treat the person with respect to the detected visual defect.

24. The method according to Claim 1, wherein said eye condition is or includes myopia.

25. The method according to Claim 1, wherein said eye condition is or includes astigmatism.